TARC

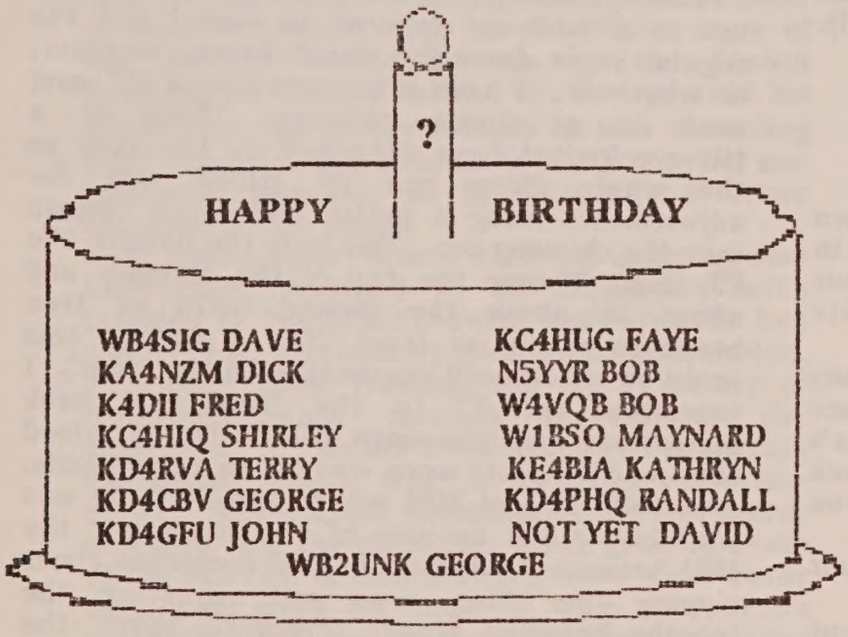
TITUSVILLE AMATEUR RADIO CLUB

SEPTEMBER, 1993

NEWSLETTER

OFFICERS

President: Bud Hughes K4CWG 269-0779 Secretary: Jerry Russell KC4UFI 267-2157
VicePresident: Cliff Hoag KC4SYD 267-7030 Treasurer: Clyde Lee K4EOS 267-9375



PRESIDENT'S CORNER

By Bud Hughes K4CWG

The Jaycee's annual Christmas parade will be Dec. 4.. Donna Thorpe is the Jaycee parade chairperson. She has asked for TARC's participation this year and we look forward to assisting Donna.

>Our club's next fox hunt is on Sept. 19, featuring Derek, KE4BBD. Knowing him and his mom and dad, you better bet it is going to be a ball of fun to locate ole Derek.

>John, KE4BBC and his hamfest committee are moving right along with preparations for this club's October 9, hamfest. Your club solicits your getting involved and lending a hand to make this a successful and fun hamfest. Remember - your participation is most important. So call, send a smoke signal, or catch on the air or at the next club meeting, any of the committee members who are, including John KE4BBC, Cliff KC4SYD 269-7030, Bob W4VQB 269-1878, Tom KQ4OY 636-6663, Clyde K4EOS 267-9375, Sherry (my very own) 269-0779, Clarence KV4BY..who did I leave out?

>I want to thank Ray N4LEM and his assistant (sorry I did not get the name nor call sign). The ARES program is off to a good start in the Titusville area, thanks to them.

>See you Tuesday, Sept. 28 at the club meeting. 73's Bud K4CWG

HELPING HAMS COMMITTEE

At the July meeting of the TARC, Clyde Lee, K4EOS presented a major need for North Brevard Hams. The problem: Hams who are unable to work on antennas, erect or climb towers, or some other need that a Ham operator is unable to accomplish alone. This may be a problem due to physical condition, age, lack of knowledge, or any other major reason preventing the accomplishment of a desired task.

>The solution: a volunteer group that will help any ham on a job that he wants accomplished. This will be limited to the talent and availability of the HELPING HAMS team.

>Les Widick - K4BZJ volunteered to head this committee and anyone desiring help should contact K4BZJ at 267-1013.....see page 6.

LEAGUE LINES
From September QSL

The FCC issued 5978 new amateur licenses in June, the largest monthly total in more than two years. Meanwhile, the Gettysburg backlog remained virtually unchanged, and 5000 new amateur applications poured in - not to mention another 5000 renewals and upgrades!

>77 members of Congress (66 representatives and 11 senators) are cosponsors of the Amateur Radio Service Joint Resolution (see July QST, page 73). Since our listing in August, the following have joined as cosponsors:

Sens Graham (FL); Gregg (NH); Barton (TX); and Warner (VA).

Reps Bachus (AL); Baker (CA); barton (TX); Bonior (MI); Bryant (TX); Clement (TN); Everett (AL); Grandy (IA); Gunderson (WI); Hansen (UT); Miller (CA); Oberstar (MN); Petri (WI); Rahall (WV); Reed (RI); Royce (CA); Olav (MN); Schiff (MN); Spence (SC); Spratt (SC); Swett (NH); Traficant (OH); Weldon (PA); and Wise (WV).

WHAT EVERY XYL SHOULD KNOW
By Carol Grayson, KB2JLW

Gentlemen, it may be time for you to sit down with your spouse, or anyone else who may be in charge of your estate, and go over your Amateur Radio equipment, explaining all of its features, options and value.

>I often hear people discussing how they acquired radio equipment from widows or other estate trustees who didn't know the gear's value. "I really robbed the widow" or "I check the Silent Keys column in QST" turn up far too regularly.

>Here are some facts you should make your spouse or estate trustee aware of:

1) Your spouse will have friends who will want to help her sell your equipment - but some will want to "have your old gear to use in your memory," or will propose a ridiculously low offer for stuff that may be worth hundreds or thousands of dollars more. Be careful! The best approach is to ask someone in advance if they'll help dispose of the gear when the time comes.

2) Spouses, don't be in a hurry to sell or give away equipment. Nothing is going to happen to the equipment if it sits in the shack for a while (simply disconnect the antenna).

3) Be wary of people who ask that you donate the equipment to nonprofit organizations. Make sure you know where the equipment is going. If the organization is legitimate, it will give you a name and number to contact.

4) Don't be in a hurry to sell that "big" radio that may be sitting in the basement. It may be a rare piece of equipment worth hundreds or thousands of dollars to collectors.

5) Antennas and towers can also be valuable. Many buyers will remove the antenna and tower for you.

6) Magazines, publications and books could be useful to Amateur Radio clubs and libraries.

7) HAMS: Last but not least are all those parts and tubes that are probably laying around. If you have no need for them now, or know you won't in the future, why not get rid of the clutter? If you intend to keep them, why not label them and put them neatly in a box? List everything and put it away in a safe place.

TUNING THE R7 VERTICAL
By Wayne Strahl W9II

I recently installed a Cushcraft R7 Vertical for use as a 'back-up' antenna in case I had the regular yagis down for maintenance, weather, or whatever. I have it mounted on a 15' mast next to a sturdy chimney. There is a tilt-over/swivel base attached to the roof so the whole thing can be tilted over for adjustments using a pulley and ropes thrown over the chimney cap. This puts the base of the R7 about 3' over the top of the chimney and about 28' above the ground, with no tree branches within at least 20'. I figured this could be considered reasonably 'in the clear'. I assembled the R7 to the instruction book dimensions and was more than a bit surprised that my SWR plots were way off on a few bands, especially 17 and 30M where the SWR dip was well below the bottom of the bands per the MFJ Antenna Analyzer. I tried numerous times tipping the thing over and adjusting the lengths between traps, trying to 'move' the SWR curves. These attempts yielded unusual and sometime inconsistent results, so I put the whole thing back together to the starting dimensions and figured that adjusting the traps was worth a try. That appears to be the secret to getting the R7 (and probably the R5, too) SWR curves where you would like them to be within the bands. I had to move the 17M trap capacitor out about 5/8" and the 30M trap cap out 3/4". The SWR curves seem a bit sharper on 17 & 30M than on the other bands, but it is possible to get the curves where you would like them. Maybe Cushcraft has some quality control problem getting the initial trap settings right (the other traps seemed to be o.k.). Hope this can help reduce the R7 frustration factor for other netters.

MICROWAVES OVER SEAWATER: WHY IT WORKS SO WELL

By Dan Halbert, KB1RT

For many years, radio scientists have been puzzled by persistent reports of superior microwave propagation over certain regions of the ocean. Good reports on 10 GHz have been obtained at distances considerably greater than line-of-sight. Now it appears that the phenomenon is, remarkably, tied in with the biology of sealife, and is not merely a physical effect due to seawater conductivity or tropospheric effects.

>Dr. Leon Fischwasser, of the German Underwater Navel Radio Laboratory, had been studying radio propagation through seawater for more than a decade, but had been stymied by mysteriously inconsistent results. The only correlation seemed to be the cloudiness of the water near the surface. After puzzling over this for more than a fortnight, Dr. Fischwasser decided to consult with an old school chum of his, Jacques Tete-du-poisson, at the French Academy for Small Sealife. Dr. T.-d.-p. told his friend that the cloudy patches he was observing were actually huge swarms of plankton, tiny sea creatures munched on by whales and other denizens of the deep.

>Dr. Fischwasser, armed with this amazing new knowledge, returned to his laboratory with samples of the plankton-rich seawater he had collected at particularly good propagation sites.

>He then tried transmitting on a variety of frequency bands through beakers of the creatures. At certain frequencies and in certain directions, there was a definite refractive effect. Micorscopic examination of the water revealed that the plankton, which grew in areas of the sea rich in iron leaching from underwater volcanoes, were all lined up with the earth's magnetic field, and in fact, were perpendicular to the direction of best refraction of the radio waves.

>Dr. Fischwasser was flabbergasted by this discovery, and quickly called in the leading expert on this variety of plankton, Prof. Jonah Gefilte, at the Israeli Institute for the Almost Invisible. Prof. Gefilte pointed out that the creatures in question, known as primus aprillius, resemble tiny worms, segmented in the middle by a hard chitinous structure. Dr. Fischwasser immediately realized that what he had were tiny dipoles that were absorbing radio waves selectively. Since all the subminature shrimp were lined up like compass needles, he had a beaker in which millions of tiny Yagi-Uda antennas were being created and destroyed every second by simple Browian motion.

>Dr. Fischwasser has published a paper on this amazing effect in the Danish journal Radio og Smorgasbord. However, since the paper was published, a number of other researchers have pointed up earlier work showing that Dr. Fischwasser has independently rediscovered a known effect, albeit manifested in a new way.

>Indeed, the earliest known observation of such an effect was by Marconi himself. Marconi was busy trying out some new apparatus one day, and because of problems, worked well into the normal dinner hour. Unwilling too leave the lab, he started some pasta boiling in a tall but clean Leyden jar. After a minute, he was startled to find that his detector was suddenly working much better. A brilliant experimentalist, he noticed that the spaghetti he was preparing was interposed between spark gap and coherer. Indeed, as the spaghetti absorbed more water and collapsed, the effect vanished. However interesting this effect was, Marconi did not follow up, since pasta at the wavelengths he was interested in using would have been ridiculously long.

>Marconi did, however, patent the idea, and later licensed it to the Mueller-Prince Radio Company, which used it both in their Marinarodyne and Al-Dente-20 receivers. A particularly clever technique was the use of lasagna in order to broadband the response. Mueller-Prince folded after only a few years of operation, though, because frequent boilovers of the salted water tended to corrode the rest of the radio, and they acquired a reputation for unreliability.

>So this remarkable phenomenon lay obscured in old radio fix-it manuals until rediscovered by Dr. Fischwasser. And since the tiny radio-plankton are eventually eaten by the largest living creatures on the earth, we can truly say that this is a whale of a tale.

THE FOLLOWING EQUIPMENT WAS STOLEN FROM AMATEUR RADIO STATION WB9IVR ON 8/23/93

Yaesu FT-109RH 220 MHz HT SN: 6 N 020426
Yaesu FT-727R 144/440 MHz HT (serial number not recorded.....ARRRGH!)
Yaesu NC-15 desk battery charger/power supply SN: 6 K 300625
Realistic HTX-202 144 MHz HT SN: 0026518
Also a beige duffel bag with red straps and a petty cash box were taken.

Case # MP930-37921, Officer J.D.Howe #237.
Call: (407) 259-1211 (Melbourne PD)
(yeah, it's a long shot, but you never know . . . .

. . . . . -Bill WB9IVR

KENWOOD RIPS FCC FOR FINING DEALERS
From QSL, September, 1993

The Kenwood Corp has called FCC actions against three of its Amateur Radio dealers "baseless and unfair...in violation of equal protection under the laws of the US," and "severely damaging to Kenwood's commercial standing in a competitive industry."

>Kenwood's complaint to the FCC is on behalf of three of its retail Amateur Radio dealers, each of whom received a Notice of Apparent Liability for $7000.

>The NALs, issued July 2, said that on March 5, 1993, the Los Angeles area office of the FCC's Field Operations Bureau received a complaint alleging that the stores were marketing transceivers capable of operation outside of the amateur bands. The complaint said these transceivers "lacked the required Commission authorization."

>FOB investigators went to the three stores, all in southern California, where Kenwood TS-50S HF transceivers were displayed and where literature about the radios "indicated that the transceiver operated on frequencies not authorized for Amateur Radio use."

>The NALs said "transceivers capable of operating outside of the Amateur Radio band are required to have Commission authorization before marketing. The Kenwood TS-50S HF transceiver lacked the required authorization. The violation was willful."

>The NALs were received by Henry Radio, Los Angeles; Jun's Electronics, Culver City; and Ham Radio Outlet, Van Nuys.

>In its March 18 issue (less than two weeks after the "complaint" to the FCC cited above), the WESTLINK REPORT said that "we hear rumors from the FCC that the agency is 'concerned' with some out-of-band capability of the new transceiver...."

>By this time, Kenwood had retained a Washington, DC, communications attorney, Chris Imlay, N3AKD. Imlay is also, incidentally, general counsel for the ARRL. Imlay asked the chief of the FCC's investigations and inspectors Branch, Enforcement Division, for a conference on the matter, saying that "on information and belief, this complaint may have been registered by a competitor of Kenwood, motivated by anticompetitive, rather than substantive concerns."

>A few days after the NALs were issued in early July, Kenwood sent a news release to its dealers, saying, "We have been aware of the FCC inquiry for some time and our attorney was assured by the FCC that this type of action (NALs) would not be taken. Please be assured that we are doing everything legally possible to have this situation resolved as quickly as possible," Kenwood said.

>On July 12, Imlay filed a response to the NALs on behalf of the three Kenwood dealers with the FCC's Cerritos, California, field office of the FOB, requesting that the notice be immediately rescinded.

>Imlay said that the complaint that the radios were being marketed without being type accepted was without merit because "This characteristic is shared by virtually every commercially made Amateur Radio transceiver for the past 20 years."

>Imlay also noted that the complaint seemed to be based in part on TS-50S literature indicating that the radios can transmit outside the amateur bands. According to Kenwood, an initial shipment of brochures for the TS-50S, printed overseas and distributed in small quantities to Kenwood dealers, did show frequency ranges greater than the amateur band limits (eg, 1.705-2.0 MHz, 3.0-4.0 MHz, etc.).

>Kenwood responded that it didn't ever advertise to CB operators, and that the offending brochures were pulled and replaced when the error was discovered.

>In his filing, Imlay recounted his letter to the chief of Investigations and Inspections, and a follow-up telephone conversation in which he was told that "any action that would be taken in this case....would be done on an industry-wide basis and not by an individual enforcement proceeding." "The Commission has known for years," Imlay wrote, "that Amateur Radio transceivers with the capability noted in the NALs were being marketed throughout the US. Under these circumstances, the issuance of the three NALs makes no sense whatsoever, and the only effect is to single out Kenwood from among the manufacturers of other Amateur Radio transceivers over the past 20 years."

>Imlay said "the Commission has not shown that the Kenwood TS-50S transceiver requires type acceptance. It's an Amateur Radio transceiver, which, upon proof of license, is modifiable for MARS or CAP operation by Kenwood. It's not intended by Kenwood or the dealers for operation on frequencies allocated to other radio services, nor have the NALs alleged that it is. There's no indication that it's been marketed or sold to other than Amateur Radio operators, CAP or MARS operators," Imlay said. "It indeed has limited transmit capability outside amateur allocations, as do other Kenwood Amateur Radio transmitters and those of virtually all Amateur Radio equipment manufacturers, but that

capability alone doesn't obligate Kenwood, or any other Amateur Radio equipment manufacturer or retailer, to obtain type acceptance for Amateur Radio equipment under current rules."

>Imlay told the FCC that if it thought that all Amateur Radio transmitters capable of transmitting "even 1 Hz" outside of the ham bands should be type accepted, than that should be accomplished through a full Notice and Comment Rule Making procedure. "This isn't necessary or desirable," he said, "but at least it would provide a fair hearing for the Amateur Radio industry."

>"The NALs are not only baseless as a matter of law, they are a completely inappropriate response to an apparent Commission concern about the possibility of misuse of the products," Imlay said.

ARRL BULLETIN 94
RE LOCAL, STATE LAW RELIEF

The FCC has granted, in part, a motion by the ARRL for a declaratory ruling asking the Commission to preempt certain state statutes and local ordinances affecting transceivers used by amateurs.

>The laws addressed (in PR Docket 91-36) prohibit the possession of such transceivers if they are capable of receiving on certain frequencies other than amateur bands.

>The ARRL said that amateur transceivers typically allow for incidental reception of frequencies adjacent to amateur bands in order to ensure adequate performance within the amateur bands. The League also said that amateurs have special needs for out-of-band reception, a fact the marketplace long has recognized by offering transceivers to accommodate those needs.

>The FCC said that state and local laws that make possession of amateur transceivers in vehicles or elsewhere illegal merely because they can receive certain frequencies, the reception of which is not precluded by federal law, are preempted by federal law. The Commission said that such local and state laws are inconsistent with the federal laws that promote and facilitate Amateur Radio.

>The Commission's action was August 20 and released August 25.

SPACE SHUTTLE VIEWING PASS

A limited number of vehicle passes are issued to allow visitors to view Space Shuttle Launch from a designated site on Kennedy Space Center. If you would like to have your name and address on a list for a vehicle pass for the next available Space Shuttle launch, please send a postcard with your name and address to:

Public Affairs Office
PA-PASS
Kennedy Space Center, FL 32899

The pass is for a standard size automobile. If you want to use a larger vehicle such as a van or a motor home, be sure to request an "Oversize Vehicle Pass". There is a high probability of getting a pass for a specific launch, if your request is received at least a month prior to the scheduled launch date.

ODE TO A SWAN OWNER

There's a radio that's obsolete
But still owned by a few,
And they would rather have it
than one that is "brand new".
It drifts, squeaks, chirps and backfires
like an antique car,
And if you're gonna badmouth it,
you'd better do it from afar.

Some of them contain the parts
of more than one radio,
They slap it, beat it, and sometimes kick it,
just to make it go.
It transmits when the tubes are good
and even when they're soft,
It drifts from the time you turn it on,
until you turn it off.

It rattles when you shake it
and it's broader than a door,
The nearest you can get to is
is 10 KC's, no more!
They keep it held together
with gum and baling wire.
A fire extinguisher hangs nearby,
in case it catches fire.

When Swan Owners are silent keys
and in the great beyond,
I hope the Lord will present them all
with a "Brand New Swan."

Written expressly for
K4EGK, Sam Maple,
By WA4WDM, Jim Bench

TREASURER'S REPORT - YEAR TO DATE
By K4EOS, Clyde Lee

Transferred from old acct.	977.82
DEPOSITS: 50/50,ARRL,dues,donations dues,hamfests,interest, tailgate, loan,stu.fees,Xmas pty.	4468.66
TOTAL INCOME	5446.48
EXPENSES: ARRL.bnk.chgs,Bud loan, gifts,Ins. Off.supp,POBox, postage,printing,stu.bks, tel, Xmaspty.,Exam.fees,fldday, hamfest,inc.fee,jc's,reptr,	5264.18
BALANCE AS AT 08/31/93	182.30
Bud's loan bal.as at 12/31/92	2333.00
Paidthrough 8/31/93	1121.50
BALANCE DUE BUD	1211.50

(HELPING HAMS - continued from page 1)
Other volunteers at the meeting were:
KD4HOQ George. KO4NQ Prenchy. KQ4OY Tom, KB4WLT Ken, KD4SRN Renaldo, KD4VFU Jack W4NMB Holland, KB4BHS Red, AF4N Wes
>Additional volunteers are needed. Please call K4BZJ to submit your name.

STILL LOOKING FOR
TILT BASE FOR ROHN 25 TOWER
ARCHIE WN3DHI 267-8918

LOOKING FOR
2 METER H.T.
WITH AUTOPATCH CAPABILITIES
KE4AEF HOWARD MCNITT

FOR SALE
TS - 440 - S AUTO TUNER
1.8 KHZ SSB FILTER
DON N2MWD 633-5566

FOR SALE
H.T. - YASEU DUAL BANDER
2 MTR/440 5 WATTS/1 WATT POWER.
COMES WITH
2 BATTERIES, SPEAKER MIKE,
WALL CHARGER, MANUAL.
LIKE NEW CONDITION.
CLYDE LEE K4EOS 267-9375

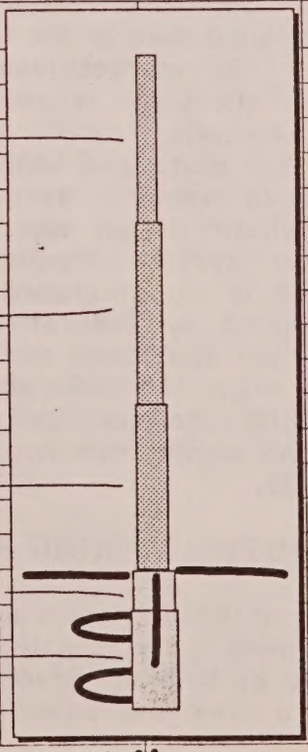
Diamond X-500A Antenna
2m/70cm Dual Band 8.3/11.7dBd

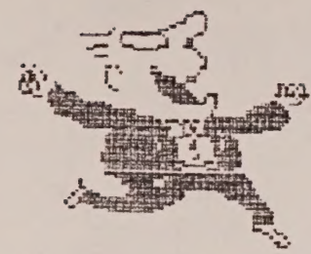
Examined by: Tom Nguyen - KQ4OY

SWR found to be highest at 1.2 for 144 to 148MHz and 1.4 for 435 to 448MHz
using MFJ-249 and Diamond SX-600 SWR analyzer/meter.

Mast is made of fiberglass & Alum

Total (in)	*Type (solid 12AWG)*	*in*	*(0.5in OD)*		
	straight wire	18.75			
	coil		1.5		
	straight wire	19		63	0.5in OD Fiber
	coil		1.5		
	straight wire	17.25			
	long coil		11		
	straight wire	17.25			
	coil		1.5	74	0.625in OD Fiber
	straight wire	19			
	coil		1.5		
	straight wire	17.25			
	long coil		11.25		
	straight wire	17.5		60	0.75in OD Fiber
	coil		1.25		
177.5	straight wire	22			
184.5	Feed Section	7		7	0.75in OD Al
	(lightning & 0.25 stub)				
198.5	Mount	14		14	0.75in OD Al
	(Al & 2 U-bolts)				
	3 Radials ~0.25wave	20.5		Total height: 218	
	(Al threaded on 1 end)				





JOKES!!

Here's a fool-proof method on "How to become a millionaire." You merely go to the bank every week and deposit $20,000. At the end of the year, you are a millionaire.

Things & Stuff.....
.....A Kentucky law says that every person must take a bath at least twice a year.
.....I wish I could catch a fish big enough to make lying unnecessary.
.....A chaperone is just an older person with experience.
.....The healthiest town in the world is so healthy that it couldn't start a cemetery until its one doctor had died of starvation.
.....Dig your well before you get thirsty.
.....laziness is a quality that prevents people from getting tired.

Salesman to small boy on phone: "Is your mother or father at home?"
Small boy: "No."
Salesman: "Is there anyone else I can speak to?"
Small boy: "My sister."
Salesman: "Let me speak to her."
Small boy: "O.K., I'll go get her."
Small boy after lengthy silence: "I can't lift her out of the play pen."

Some fellows stay in the rut,
While others head the throng,
All men may be born equal,
But don't stay that way long.

Telephone operator: "You call every morning and ask for the correct time. I'm curious to know why you insist on the correct time every morning."
Voice: "I have to be very careful about the correct time, because I blow the noon whistle at the factory."
T.O.: "That's funny, because every day at noon I set our clock by your whistle."

Betcha Didn't Know.....
.....it's doggone hard to keep your temper when you know you're wrong.
.....a lot more people would try to do right if they thought it was wrong.
.....you shouldn't feel sorry for yourself; feel sorry for the folks who have to live with you.
.....you shouldn't hyphenate the word headache unless it's a splitting one.
.....overeating will make you thick at your stomach.
.....a clear conscience is the original tranquilizer.
.....a committee is the unable who have been asked by the unwilling to do the unnecessary.
.....Father Time may be a great healer, but he's certainly no beauty specialist.
.....we are living in the present, tense.
.....maybe fish don't like the way we smell, either.

REMEMBER WHEN?
1960: According to a Department of Agriculture journal, they've finally figured out what the doctors scribbling on prescription blanks say. It is: "I got my $5. Now he's all yours."
1965: The trouble with putting in your two cents worth these days, is that it costs five cents to mail it.
1965: Automation is when you replace a $75 a week clerk with a $200,000 machine.

"If you want to smoke, sir, you'll have to walk on the other side of the street."

MEMBERSHIP UPDATE

Total Membership: 230 (includes 39 family members & 8 honorary)

New Members: WB4RIS JIM ROBINSON
KE4AED JIM SHAVER
KE4BIA KATHRYN SHAVER
K1SJO WILLIAM AYER

Renewals: KD4MIW SHARON RUSSELL
WB4PXO JIM MORGAN
W2STS JESSE LEGRAND
KD4TLS BEN MCMAHAN
KC4VMP JIM CLARK
KC4VMQ DONNA CLARK
WB9TUM BONNY LATHEM
WB2UNK GEORGE FLORES
N4KHU DAVID ROBERTS
N4KXH KEN WINDHAM

UPCOMING HAMFESTS

9/11&12- Melbourne	Melbourne Auditorium 625 Hibiscus Blvd. Talk-in on 146.85
9/26- N.Pt.Richey	New Pt.Richey Rec.Centr. 6630 Van Buren. Talk-in on 145.350 or 147.150
10/9- Titusville	FREE - Sand Point Pavilion Rt.406 E. of US1. Ex.80 off I-95. Talk-in on 146.910
10/16- Starke	Bradford Co.Fairgrnds. US301&SR100 Talk-in on 145.150
10/23&24-W.Palm Bh.	Expo Ctr., S.Fla Fairgrnds. SR80 east of US441 Talk-in on 147.165
10/29-30- St.Pete	QCWA Nat'l Conv.atS.Pete Clrwtr.AP Hol.Inn. Talk-in on 145.290
11/06-Eustis	Lake Co.Fairgrnds Talk-in on147.255&442.900
11/20-21- Tampa	Expo Hall,FL St.Fairgrnds Talk-in on 146.940
12/4 -Okeechobee	Agricul.Ctr.Bldg. on US441 Talk-in on 147.195

TITUSVILLE AMATEUR RADIO CLUB
P.O.BOX 73
TITUSVILLE FL 32781